

Commissioner for Patents:

In response to the Requirement for Information mailed October 13, 2004, please extend the period of time for response three months, to expire on March 13, 2005.

Enclosed are a Petition for an Extension of Time and the requisite fee. Applicant submits the following response.

First, applicant wishes to make some introductory comments, and then respond to the specific requests expressed in the Office Action.

**Introductory Comments:**

Public discussion has recently included some of the concepts behind applicant's invention's processing of remote computer's hidden header data in the current communication to determine user information. This is identified in the Abstract of the Disclosure as follows: "As one of the remote computers is in current communication with the host computer, the customer data collector collects and analyzes data from the remote computer including search requests, uniform resource locators (URLs), and hidden data."

The following is from the website GRC.com, and is authored by Steve Gibson who is a highly respected systems security consultant and software developer whose clients include the FBI.

[https://www.grc.com/x/ne.dll?bh0bkyd2:](https://www.grc.com/x/ne.dll?bh0bkyd2)

"The text below might uniquely identify you on the Internet - Your Internet connection's IP address is uniquely associated with the following "machine name": 24-41-46-215.attbi.cable.earthlink.net - The string of text above is known as your Internet connection's "reverse DNS." The end of the string is probably a domain name related to your ISP. This will be common to all customers of this ISP. But the beginning of the string uniquely identifies your Internet connection. The question is: Is the beginning of the string an "account ID" that is uniquely and permanently tied to you, or is it merely related to your current public IP address and thus subject to change? - The concern is that any web site can easily retrieve this unique "machine name" (just as we have)

whenever you visit. It may be used to uniquely identify you on the Internet. In that way it's like a "supercookie" over which you have no control. You can not disable, delete, or change it. Due to the rapid erosion of online privacy, and the diminishing respect for the sanctity of the user, we wanted to make you aware of this possibility. Note also that reverse DNS may disclose your geographic location. - If the machine name shown above is only a version of the IP address, then there is less cause for concern because the name will change as, when, and if your Internet IP changes. But if the machine name is a fixed account ID assigned by your ISP, as is often the case, then it will follow you and not change when your IP address does change. It can be used to persistently identify you as long as you use this ISP. - There is no standard governing the format of these machine names, so this is not something we can automatically determine for you. If several of the numbers from your current IP address (24.41.46.215) appear in the machine name, then it is likely that the name is only related to the IP address and not to you. But you may wish to make a note of the machine name shown above and check back from time to time to see whether the name follows any changes to your IP address, or whether it, instead, follows you. - Just something to keep in mind as you wander the Internet." (emphasis by underlining added)

Specifically, applicant claims the use of the "hidden header data" to determine the geographic location of a shopper as disclosed in the application filed February 18, 2000, and as Mr. Gibson's discussion above suggests is possible, "reverse DNS may disclose your geographic location" [using header data from the current communication]. At the request of the Examiner to provide a concrete and useful example of the patent claims, applicant constructed the demonstration website "discountcenter.us" which the Examiner visited on November 12, 13 and 14, 2003, and where applicant demonstrated that using the present invention the host system was able to determine the Examiner's geographic location (VA) and his affiliation (FTS2001/US Patent & Trade), without cookies or prior data.

More generally, Applicant's claims involve the use of header data (network address, referrer, prior website, search engine search string, domain name and software on the remote computer) to look-up user information to generate customized

product selection. It is interesting to note that Mr. Gibson likens the use of hidden header data to a "supercookie over which you have no control."

While there are no materials that concern the technical aspects of determining shopper characteristics using header data fields, to the best of applicant's knowledge, there are management books like "The One To One Future" from 1993 by Don Peppers and Martha Rogers in a non-computer/Internet environment that explore the opportunity to end the "mass marketing paradigm" for even traditional businesses, for example (page 270): "Attached to your receipt you'll find this week's flier promoting new products you personally may want to try. We choose the ones to tell you about by what you've bought before. Someone who experiments with new barbeque sauces will be offered other outdoor cooking products."

**Response to Specific Concerns Expressed in the Office Action mailed  
October 13, 2004:**

1. The first paragraph, on page 2 of the Office Action, refers to "present value computation detailed in reference formulas in pages 5, 8, 9, 16, 21, 22 ...." Applicant cannot locate such a "present value computation detailed in reference formulas" and requests the Examiner to clarify the request made. The present invention does not concern present value computation nor reference formulas.

2. "Applicant has not clearly defined whether the applicant's invention uses the information stored on the [remote] computer system (e.g. cookies)..." Applicant responds to this request assuming the reference to page 15 was intended to be to page 12.

Applicant's invention does not require use of information stored on the remote system (cookies) and applicant's invention can determine information concerning the remote computer system even if it does not allow cookies. Applicant's invention is based on using hidden header data along with private and public databases to determine "shopper characteristics" for the user of the remote system; the use of this header data can be done on a first visit before the user has been cooked.

3. "On page 14, line 20 applicant recites HTTP includes provision for sending 'header fields' from web browser .. It is not clearly defined .. whether the information in example of a set of header fields is applicant's invention or it is a prior art."

The applicant's invention does not claim the header fields or any set of header fields per se. The end purpose of applicant's invention is not determining header data provided by the remote system; applicant's invention combines header data with private and public information for the purpose of determining user information to customize shopper screens, which was non-obvious (and now 5 years later is just being discussed).

In response to the requests of information starting at the last line on page 2 of the Office Action, applicant responds as follows:

4. "Whether the example of information as disclosed in the originally filed specification is applicant's invention, or, at the time of information this information was made available by user's computer system which could be accessed by one of ordinary skill in the art."

As noted above, the applicant's invention does not claim the header fields or any set of header fields per se. The end purpose of applicant's invention is not determining header data provided by the remote system; applicant's invention combines header data with private and public information for the purpose of determining user information to customize shopper screens, which was non-obvious.

5. "If applicant is not using the information stored on user's computer, how does applicant formulate tailored screens."

Applicant does not use information stored on user's computer but uses hidden header data from the current communication to indirectly determine the user's shopper characteristics by using: (1) the "header network address field" whereby using the source IP and reverse DNS or other public or private database the host system can determine such information as shopper location, ISP information, and previous sites visited; (2) the "header referrer field" whereby the host system uses the prior website and search engine search string along with private and public databases to determine shopper characteristics; (3) the "header domain name field" whereby the user's choice of different domain names that are served by a single IP can be used to determine shopper characteristics; and (4) "header accept and agent fields" whereby the host system recognizes key words in these fields (along with private and public databases) to determine the capabilities of the user's computer system and thereby shopper

characteristics. Applicant can supply the code that it used in its demonstration to derive shopper characteristics by using data from header fields and using data from header fields to access its own database and 3rd party databases

6. "In the response received by the office on 12 July 2004, applicant argues that its invention presents e-commerce selections by excluding prior art .. If two users using different computers, accessing applicant's invention using the same communication line and visiting the same URL will get the same tailored screen, or it will be different. If it will be different, then please explain.."

Without employing prior art (such as cookies), shoppers using different computers, accessing applicant's invention using the same communication line and visiting the same URL will get different tailored screen if there are differences between the headers sent by each of them to the host system - which is highly likely; but the host system will serve the same tailored screen if the headers are identical. Following are three sets of headers from shoppers using different computers, accessing applicant's invention using the same communication line and visiting the same URL:

A. Computer #1 Windows XP

HTTP\_ACCEPT \*/\*

HTTP\_ACCEPT\_LANGUAGE en-us

HTTP\_CONNECTION Keep-Alive

HTTP\_HOST discountcenter.us

HTTP\_USER\_AGENT Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1;

.NET CLR 1.0.3705; .NET CLR 1.1.4322)

IP Address 24.41.46.215

TCP Port 9345

Reverse-DNS Record 24-41-46-215.attbi.cable.earthlink.net

B. Computer #2 Windows XP

HTTP\_ACCEPT image/gif, image/x-xbitmap, image/jpeg, image/pjpeg,  
application/x-shockwave-flash, application/vnd.ms-excel, application/vnd.ms-  
powerpoint, application/msword, \*/\*

HTTP\_ACCEPT\_LANGUAGE en-us

HTTP\_CONNECTION Keep-Alive

HTTP\_HOST discountcenter.us

HTTP\_USER\_AGENT Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1;  
.NET CLR 1.1.4322)

IP Address 24.41.46.215

TCP Port 9130

Reverse-DNS Record 24-41-46-215.attbi.cable.earthlink.net

C. Computer #3 Windows 2000 Pro NT

HTTP\_ACCEPT image/gif, image/x-xbitmap, image/jpeg, image/pjpeg,  
application/vnd.ms-excel, application/msword, application/x-shockwave-flash, \*/\*

HTTP\_ACCEPT\_LANGUAGE en-us

HTTP\_CONNECTION Keep-Alive

HTTP\_HOST discountcenter.us

HTTP\_USER\_AGENT Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.0)

IP Address 24.41.46.215

TCP Port 9068

Reverse-DNS Record 24-41-46-215.attbi.cable.earthlink.net

Although the remote computers are using the same communication line  
(24.41.46.215 with the same reverse DNS record) and visiting the same URL  
(discountcenter.us), the host system can recognize different shopper characteristics for  
these similar shoppers; for example, despite all three users being "business users on

Windows PCs using IE from the same ISP and on the same communications line", computer #3 is about 3 years old since it uses NT 5.0 and the shopper's screen could be tailored to offer an "upgrade special advertisement". Also, even very similar machines may be differentiated by small differences in the headers (for example computers #1 and #2 while very similar have slightly different software and which installed differently) and can be served different tailored pages based on differences in the header data fields and the host's past experience with the shoppers having those header fields without using registration information or cookies.

7. "All the material .. that describe using URLs, HTTP or any other protocols for generating tailored store screens."

Applicant knows of no such material.

8. "Provide a list of keywords that are helpful in locating publications related to the disclosed art of formulating tailored store screens."

To the best of applicants knowledge we have provided Examiner with all examples, references and patents dated prior to the filing date of the present application known to applicant that disclose relevant subject matter.

The following keywords may be helpful for the searching of relevant databases including the PTO's. The PTO advanced search format is used  
<http://patft.uspto.gov/netahtml/search-adv.htm>:

abst/((computer or internet) and product and selection and (customize or tailor))

or

aclm/((computer or internet) and product and selection and (customize or tailor))

or

spec/((computer or internet) and product and selection and (customize or tailor))

A search just conducted by applicant (<http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=%2Fnetahhtml%2Fsearch-adv.htm&r=0&p=1&f=S&l=50&Query=abst%2F%28computer+and+product+and+selecti>

on+and+%28customize+or+tailor%29%29+or+acim%2F%28computer+and+product+and+selection+and+%28customize+or+tailor%29%29+or+spec%2F%28computer+and+product+and+selection+and+%28customize+or+tailor%29%29&d=ptxt) revealed United States Patent 6,859,791. The patent shows that certain geographic information is obtainable from the IP address.

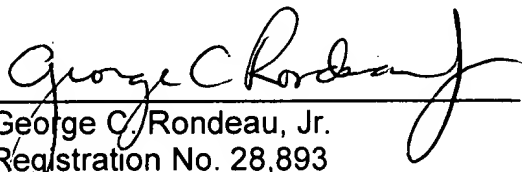
**Conclusion:**

Applicant believes it has made a good faith response to the requirement for information under 37 CFR 1.105.

In view of the forgoing, applicant believes that the claims of the Amendment filed on July 21, 2003 (canceling all pending claims and adding new claims 48-135) are allowable and requests that prosecution of this application continue under the RCE. It is noted that contrary to the Office Action Summary, the pending claims include claim 48 (i.e., claims 48-105 and 113-135).

If questions remain regarding this application, the Examiner is invited to contact the undersigned at (206) 628-7739.

Respectfully submitted,  
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